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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,426	01/23/2002	Robert Krupczak	019287-0317331	7921
909 7590 11/26/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER SERRAO, RANODHI N	
			ART UNIT 2141	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/055,426

Applicant(s)

KRUPCZAK, ROBERT

Examiner

Ranodhi Serrao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 and 29-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 18-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 September 2007 has been entered.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-11 and 18-28 are drawn to computer network monitoring, classified in class 709, subclass 224.
 - II. Claims 12-17 and 29-31 are drawn to hierarchical graphical user interface, classified in class 715, subclass 713.
3. The inventions are distinct, each from the other because of the following reasons:
4. Inventions Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination Group II has separate utility such as displaying relationships of hierarchical items. See MPEP § 806.05(d).

5. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

7. The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Interview Summary

8. During a telephone conversation with Rick Toering (Reg. No. 43,195) on 02 November 2007 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-11 and 18-28. Affirmation of this election must be made

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by applicant in replying to this Office action. Claims 12-17 and 29-31 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. See attached interview summary.

Response to Arguments

9. Applicant's arguments with respect to elected claims 1-11 and 18-28 have been considered but are moot in view of the new ground(s) of rejection.

10. The applicant argued in substance the newly added limitations of independent claims 1, 4, 9, 18, 24, 27, and 28. However, the new grounds teach these and the added features. See rejections below.

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 1, 4, 9, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. (6,983,317) and Ramanathan et al. (6,286,047).

13. As per claim 1, Ramanathan et al. teaches a computer-based method for collecting dependency data specifying dependency relationships between networked resources (see Ramanathan et al., col. 5, line 59-col. 6, line 2), the method including: monitoring a first managed networked resource via a software agent executing on the first managed networked resource, wherein the software agent is managed by a software manager executing remotely from the first managed networked resource (see

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Ramanathan et al., col. 32, lines 11-28); collecting, by the software agent executing on the first managed networked resource, configuration data describing the first managed networked resource, wherein the configuration data is collected from communications between the first managed networked resource and one or more other networked resources (see Ramanathan et al., col. 7, lines 39-57); extracting, by the software agent executing on the first managed networked resource, dependency data from the configuration data (see Ramanathan et al., col. 27, lines 26-53); and communicating the dependency data from the software agent to the software manager (see Ramanathan et al., col. 25, lines 61-67). But fails to teach the dependency data specifying either provider or consumer a dependency relationship between the first managed networked resource and the one or more other networked resources; wherein said provider dependency relationship indicates that a problem at the first managed networked resource will propagate to the one or more other networked resources, and said consumer dependency relationship indicates that a problem at the one or more other networked resources will propagate to the first managed networked resource; populating a repository with the dependency data, wherein the repository is stored separate from other configuration data collected by the software agent. However, Bishop et al. teaches the dependency data specifying either provider or consumer a dependency relationship between the first managed networked resource and the one or more other networked resources (see Bishop et al., col. 27, lines 19-34); wherein said provider dependency relationship indicates that a problem at the first managed networked resource will propagate to the one or more other networked resources (see

Bishop et al., col. 29, lines 29-39), and said consumer dependency relationship indicates that a problem at the one or more other networked resources will propagate to the first managed networked resource (see Bishop et al., col. 8, line 50-col. 9, line 62); populating a repository with the dependency data, wherein the repository is stored separate from other configuration data collected by the software agent (see Bishop et al., col. 140, lines 13-28). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ramanathan et al. to the dependency data specifying either provider or consumer a dependency relationship between the first managed networked resource and the one or more other networked resources; wherein said provider dependency relationship indicates that a problem at the first managed networked resource will propagate to the one or more other networked resources, and said consumer dependency relationship indicates that a problem at the one or more other networked resources will propagate to the first managed networked resource; populating a repository with the dependency data, wherein the repository is stored separate from other configuration data collected by the software agent in order to monitor, store and act upon, network state information which is organized as a series of relationships among managed network elements (see Bishop et al., col. 2, lines 15-27).

14. As per claim 4, Ramanathan et al. teaches a computer-based method for communicating dependency data, specifying dependency relationships between network devices (see Ramanathan et al., col. 5, line 59-col. 6, line 2), including: monitoring a first managed network device via a software agent executing on the first managed network device, wherein the software agent is managed by a software

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manager executing remotely from the first managed network device (see Ramanathan et al., col. 32, lines 11-28); collecting, by the software agent executing on the first managed network device, configuration data describing the first managed network device, wherein the configuration data is collected from communications between the first managed network device and one or more other managed network devices (see Ramanathan et al., col. 7, lines 39-57); extracting, by the software agent executing on the first managed network device, dependency data from the configuration data (see Ramanathan et al., col. 27, lines 26-53), and communicating the dependency data from the software agent to the software manager (see Ramanathan et al., col. 25, lines 61-67). But fails to teach the dependency data specifying either provider or consumer dependency relationships between the first managed network device and the one or more other managed network devices, wherein said provider dependency relationship indicates that a problem at the first managed device will propagate to the one or more other managed network devices, and said consumer dependency relationship indicates that a problem at the one or more other managed network devices will propagate to the first managed network device; generating a table that includes the extracted dependency data, wherein the table is stored separate from other configuration data associated with the first managed network device that has been collected by the software agent; offering access to the table, the access being offered via a dependency interface of the software agent and using a distributed systems management protocol. However, Bishop et al. teaches the dependency data specifying either provider or consumer dependency relationships between the first managed network device and the

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one or more other managed network devices (see Bishop et al., col. 27, lines 19-34), wherein said provider dependency relationship indicates that a problem at the first managed device will propagate to the one or more other managed network devices (see Bishop et al., col. 29, lines 29-39), and said consumer dependency relationship indicates that a problem at the one or more other managed network devices will propagate to the first managed network device (see Bishop et al., col. 8, line 50-col. 9, line 62); generating a table that includes the extracted dependency data, wherein the table is stored separate from other configuration data associated with the first managed network device that has been collected by the software agent (see Bishop et al., col. 38, lines 31-37); offering access to the table, the access being offered via a dependency interface of the software agent and using a distributed systems management protocol (see Bishop et al., col. 13, lines 12-22). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ramanathan et al. to the dependency data specifying either provider or consumer dependency relationships between the first managed network device and the one or more other managed network devices, wherein said provider dependency relationship indicates that a problem at the first managed device will propagate to the one or more other managed network devices, and said consumer dependency relationship indicates that a problem at the one or more other managed network devices will propagate to the first managed network device; generating a table that includes the extracted dependency data, wherein the table is stored separate from other configuration data associated with the first managed network device that has been collected by the software agent; offering access to the table, the

access being offered via a dependency interface of the software agent and using a distributed systems management protocol in order to monitor, store and act upon, network state information which is organized as a series of relationships among managed network elements (see Bishop et al., col. 2, lines 15-27).

15. As per claim 9, Ramanathan et al. teaches a computer-based method for distributed systems management (see Ramanathan et al., col. 5, line 59-col. 6, line 2), including: monitoring a first managed network device with a first software agent executing on the first managed network device, wherein the software agent is managed by a software manager executing remotely from the first managed network device (see Ramanathan et al., col. 32, lines 11-28); collecting, by the software agent executing on the first network device, configuration data describing the first managed network device, wherein the configuration data is collected from communications between the first managed network device and a plurality of other network devices (see Ramanathan et al., col. 7, lines 39-57); gathering, by the first software agent executing on the first managed network device dependency data (see Ramanathan et al., col. 27, lines 26-53); and communicating the dependency data from the first software agent to the software manager (see Ramanathan et al., col. 25, lines 61-67). But fails to teach dependency data describing either a provider or a consumer dependency relationship between the first managed network device and a second network device, wherein said provider dependency relationship indicates that a problem at the first managed network device will propagate to the second network device, and said consumer dependency relationship indicates that a problem at the second network device will propagate to the

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first managed network device; initiating, by the first managed network device, a second software agent to monitor the second device based on the dependency data gathered by the first software agent, wherein the second software agent executes on the second device. However, Bishop et al. teaches dependency data describing either a provider or a consumer dependency relationship between the first managed network device and a second network device (see Bishop et al., col. 27, lines 19-34), wherein said provider dependency relationship indicates that a problem at the first managed network device will propagate to the second network device (see Bishop et al., col. 29, lines 29-39), and said consumer dependency relationship indicates that a problem at the second network device will propagate to the first managed network device (see Bishop et al., col. 8, line 50-col. 9, line 62); initiating, by the first managed network device, a second software agent to monitor the second device based on the dependency data gathered by the first software agent, wherein the second software agent executes on the second device (see Bishop et al., col. 12, line 64-col. 13, line 11). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ramanathan et al. to dependency data describing either a provider or a consumer dependency relationship between the first managed network device and a second network device, wherein said provider dependency relationship indicates that a problem at the first managed network device will propagate to the second network device, and said consumer dependency relationship indicates that a problem at the second network device will propagate to the first managed network device; initiating, by the first managed network device, a second software agent to monitor the second device based on the dependency data gathered

by the first software agent, wherein the second software agent executes on the second device in order to monitor, store and act upon, network state information which is organized as a series of relationships among managed network elements (see Bishop et al., col. 2, lines 15-27).

16. As per claim 18, Ramanathan et al. teaches a computer-based method for collecting dependency data specifying dependency relationships between networked resources (see Ramanathan et al., col. 5, line 59-col. 6, line 2), the method including: monitoring a plurality of networked resources via a software agent executing on each of the networked resources, wherein the plurality of software agents are managed by a software manager executing remotely from the plurality of networked resources (see Ramanathan et al., col. 32, lines 11-28); gathering, by the plurality of software agents executing on the networked resources, configuration data describing the plurality of networked resources, wherein the configuration data is collected from communications between the plurality of networked resources (see Ramanathan et al., col. 7, lines 39-57); extracting, by the plurality of software agents, dependency data from the gathered configuration data (see Ramanathan et al., col. 27, lines 26-53); communicating the dependency data from the plurality of software agents to the software manager (see Ramanathan et al., col. 25, lines 61-67). But fails to teach the dependency data including data specifying either provider or consumer dependency relationships between the plurality of networked resources, wherein said provider dependency relationship indicates that a problem at the first networked resource will propagate to a second networked resource, and said consumer dependency relationship indicates that

a problem at the second networked resource will propagate to the first networked resource; and adding at least a portion of the dependency data to a central repository managed by the software manager of a manager application, wherein the portion of the dependency data added to the central repository is stored in the central repository separately from other configuration data. However, Bishop et al. teaches the dependency data including data specifying either provider or consumer dependency relationships between the plurality of networked resources (see Bishop et al., col. 27, lines 19-34), wherein said provider dependency relationship indicates that a problem at the first networked resource will propagate to a second networked resource (see Bishop et al., col. 29, lines 29-39), and said consumer dependency relationship indicates that a problem at the second networked resource will propagate to the first networked resource (see Bishop et al., col. 8, line 50-col. 9, line 62); and adding at least a portion of the dependency data to a central repository managed by the software manager of a manager application, wherein the portion of the dependency data added to the central repository is stored in the central repository separately from other configuration data (see Bishop et al., col. 140, lines 13-28). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ramanathan et al. to the dependency data including data specifying either provider or consumer dependency relationships between the plurality of networked resources, wherein said provider dependency relationship indicates that a problem at the first networked resource will propagate to a second networked resource, and said consumer dependency relationship indicates that a problem at the second networked resource will propagate to

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the first networked resource; and adding at least a portion of the dependency data to a central repository managed by the software manager of a manager application, wherein the portion of the dependency data added to the central repository is stored in the central repository separately from other configuration data in order to monitor, store and act upon, network state information which is organized as a series of relationships among managed network elements (see Bishop et al., col. 2, lines 15-27).

17. Claims 2, 5-8, 10-11, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. and Ramanathan et al. as applied to claims 1, 4, 9, and 18 above, and further in view of Kekic et al. (6,272,537).

18. As per claim 2, Bishop et al. and Ramanathan et al. teach the mentioned limitations of claim 1 above but fail to teach a method wherein the repository is stored on the first managed networked resource. However, Kekic et al. teaches a method wherein the repository is stored on the first managed networked resource (see Kekic et al., column 5, lines 8-14). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ramanathan et al. and Bishop et al. to a method wherein the repository is stored on the first managed networked resource in order to provide a new capability for creating a managed element template, called an element manager, for a management-enabled computer network element, such as a bridge, a workstation, or perhaps, a computer software application that is executing a computer system connected to the network (see Kekic, col. 5, lines 25-39).

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19. As per claims 5-8, 10-11, and 19-22, the above-mentioned motivation of claim 2 applies fully in order to combine Kekic et al., Ramanathan et al., and Bishop et al.

20. As per claim 5, Ramanathan et al., Kekic et al. and Bishop et al. teach the distributed systems management protocol is an open standard (see Kekic et al., column 1, lines 35-43).

21. As per claim 6, Ramanathan et al., Kekic et al. and Bishop et al. teach the distributed systems management protocol is SNMP (see Kekic et al., column 2, lines 20-27).

22. As per claim 7, Ramanathan et al., Kekic et al. and Bishop et al. teach offering access includes the software manager of a distributed systems management software application communicating across a network with the software agent using the distributed systems management protocol (see Kekic et al., column 2, lines 36-49).

23. As per claim 8, Ramanathan et al., Kekic et al. and Bishop et al. teach the software agent communicates with the software manager of a distributed systems management software application using the distributed systems management protocol to raise a trap based on the dependency data included in the table (see Kekic et al., column 2, lines 36-49).

24. As per claim 10, Ramanathan et al., Kekic et al. and Bishop et al. teach the first managed network device is managed by the software manager of a distributed systems management software application and the second network device is also managed by the distributed systems management software application at the time the dependency data is gathered by the first software agent (see Kekic et al., column 8, lines 21-34).

25. As per claim 11, Ramanathan et al., Kekic et al. and Bishop et al. teach the first managed network device is managed by the software manager of a distributed systems management software application and the second network device is not being managed by the software manager of the distributed systems management software application at the time the dependency data is gathered by the first software agent (see Kekic et al., column 8, lines 21-34: wherein it is obvious to one of ordinary skill in the art to implement not managing the second device by the distributed system management software from reading the above reference).

26. As per claim 19, Ramanathan et al., Kekic et al. and Bishop et al. teach the networked resources are managed by the software manager of the manager application (see Kekic et al., column 5, lines 8-14).

27. As per claim 20, Ramanathan et al., Kekic et al. and Bishop et al. teach wherein, based on the portion of the dependency data included in the central repository, the software manager of the manager application initiates management of one or more additional resources not included in the plurality of networked resources (see Kekic et al., column 5, lines 8-14).

28. As per claim 21, Ramanathan et al., Kekic et al. and Bishop et al. teach wherein, the one or more additional resources that the software manager of the manager application initiates management of are specified as having dependency relationships with the plurality of networked resources (see Kekic et al., column 5, lines 8-14).

29. As per claim 22, Ramanathan et al., Kekic et al. and Bishop et al. teach manager application offers a client application access to the central repository, the access using a distributed systems management protocol (see Kekic et al., column 6, lines 15-29).

30. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramanathan et al., Bishop et al. and Kekic et al. as applied to claims 1 and 2 above, and further in view of Reichmeyer et al. (6,286,038). Ramanathan et al., Kekic et al. and Bishop et al. teach the mentioned limitations of claim 12 above but fail to teach collecting dependency data from a plurality of networked resources including the first managed networked resource; and storing the dependency data in a repository centralized within a distributed systems management environment wherein the centralized repository is stored in the software manager of the distributed systems management environment separately from other configuration data associated with the plurality of networked resources. However, Reichmeyer et al. teaches collecting dependency data from a plurality of networked resources including the first managed networked resource; and storing the dependency data in a repository centralized within a distributed systems management environment wherein the centralized repository is stored in the software manager of the distributed systems management environment separately from other configuration data associated with the plurality of networked resources (see Reichmeyer et al., col. 5, lines 11-38). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ramanathan et al., Kekic et al. and Bishop et al. to collecting dependency data from a plurality of

networked resources including the first managed networked resource; and storing the dependency data in a repository centralized within a distributed systems management environment wherein the centralized repository is stored in the software manager of the distributed systems management environment separately from other configuration data associated with the plurality of networked resources in order to permit the automatic configuration of IP parameters that are interface specific and non-global on an IP host (see Reichmeyer et al., col. 4, lines 31-43).

31. Claims 23-28 have similar limitations as to claims 1-11 and 18-22 above; therefore, they are being rejected under the same rationale.

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Conclusion

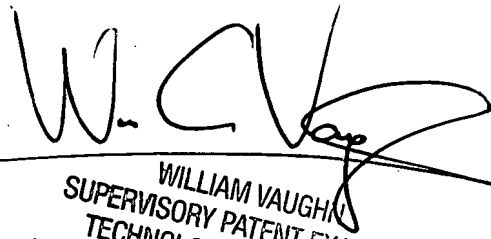
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharra can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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11/13/2007



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